

Chapter 4, lesson 56, Roof texture

In this lesson we will texture the roof and add some detail to it around the edges.

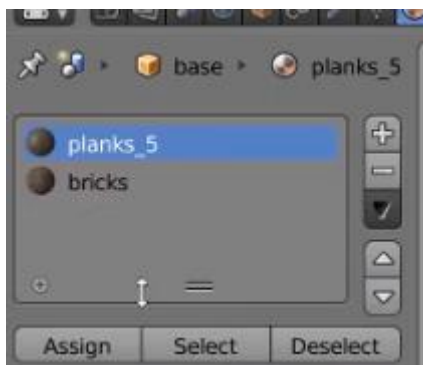
Chapter 4, lesson 56, Roof texture

So far, our roof has only had a stretched look and no work has been done to it. It is time to change that and give it some love. Later we will add a chimney and some weatherproofing, but let's start with the texture.

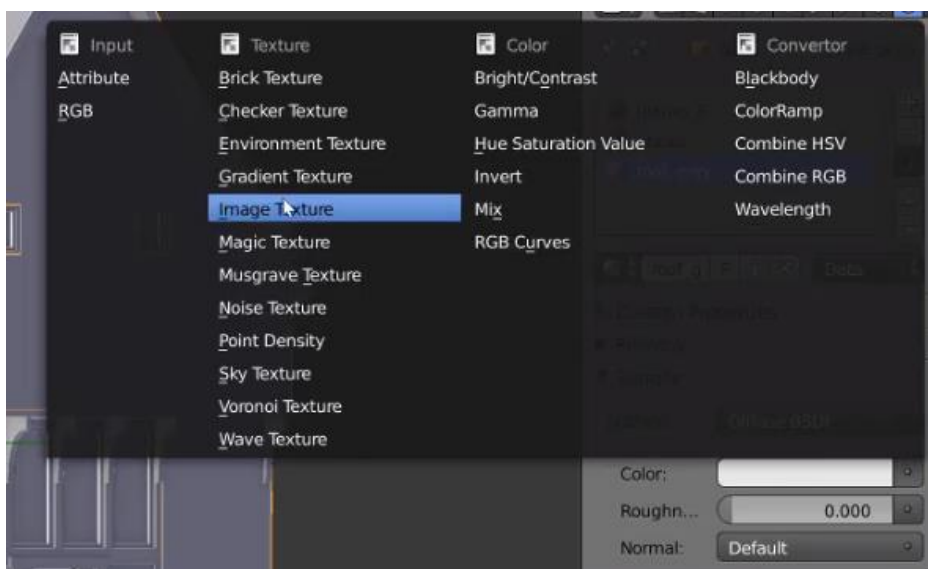
If we look at the reference image we can see that the roof is a straw roof. However, we are going to make another kind of roof for this building using our freedom as artist to go outside of what the reference shows. If you do this, it is highly recommended that you take some time and find reference for whatever change you want to make. In this case you can look for images of medieval rooftiles on the internet to get a sense of how it might look. You may think that you know how it looks but that is very seldom the case. You will save yourself a lot of time by doing some simple searches.

Let's start the lesson. Go to the materials tab while the base building object is selected. From here you can see that we have added two materials in previous lessons. The bricks and the planks.

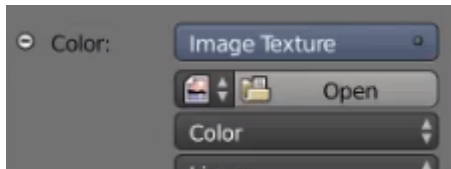
As a side note, put your attention to the buttons below the sets of materials. We have "Assign", "Select", and "Deselect". We have used Assign before. Select and deselect is kind of self-explanatory. Select adds and deselect removes the faces that has the selected material. These buttons can sometimes be very useful.



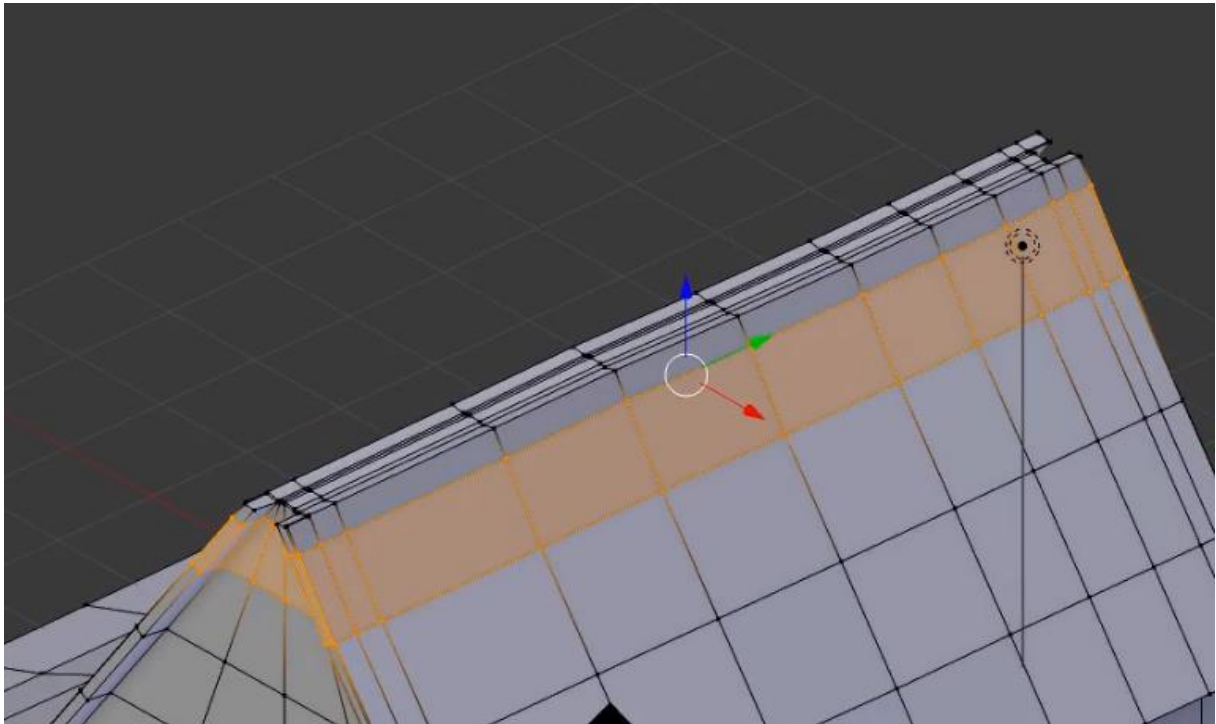
For now, click the plus button to add a new material and call it "roof_grey". Click the dot next to the color in the surface section below and select image texture.



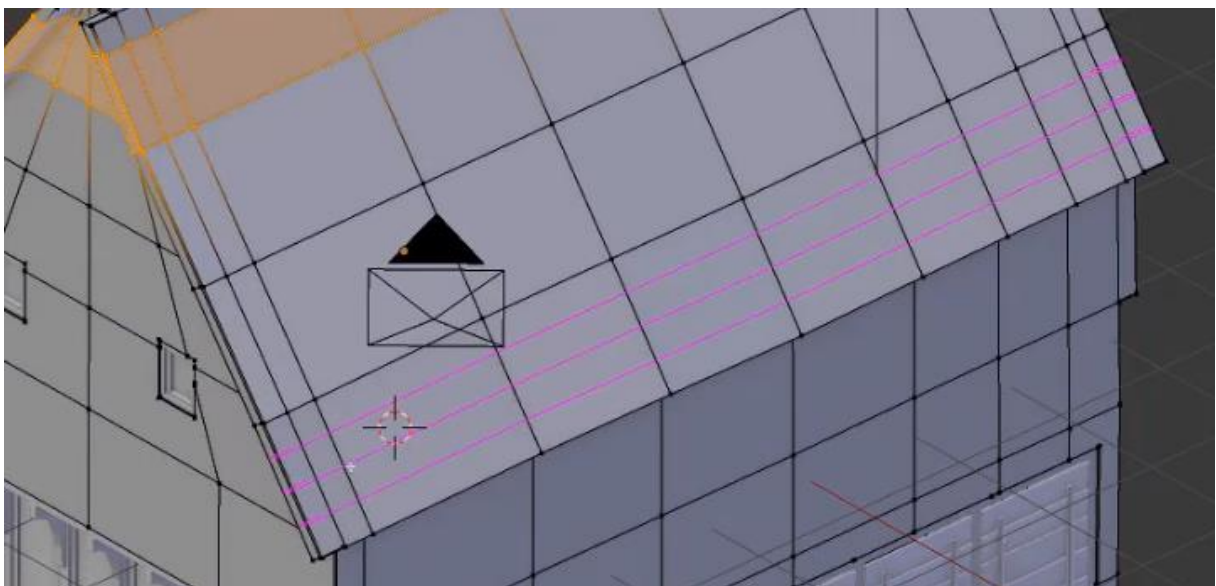
Then click open and browse to the image called "medieval_roof_2.png" that is included in the course files.



Now we will prepare the geometry of the roof before we continue to unwrap. We will need another edge loop at the top of the roof about as far from the top as the sides of the roof is extruded out. Add an edge loop at the top so that you get geometry that looks like this.

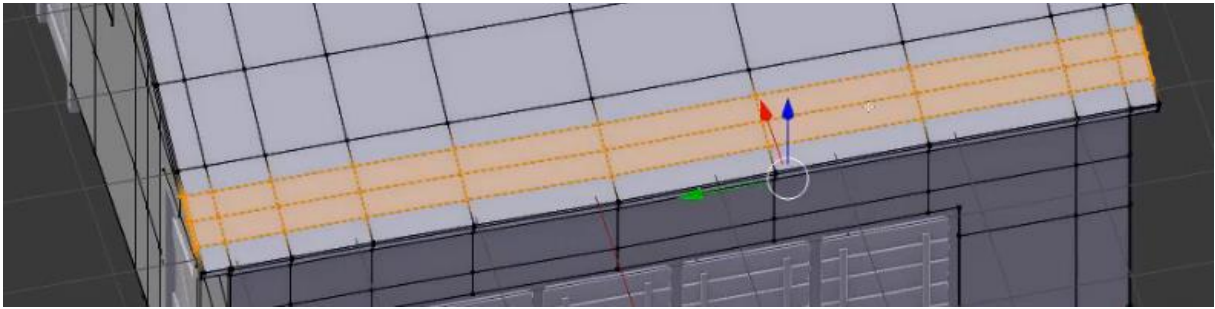


In the video we add three edge loops and delete the bottom two ones to get this edge loop exactly one third down, but you can also place it by eye. Do the same for the bottom.

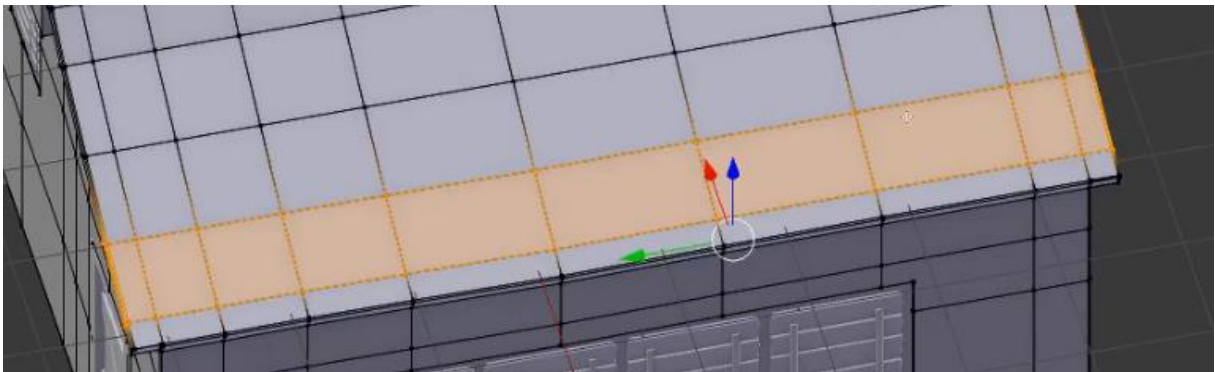


We add three edge loops here and then we will delete the top two to get the same space here as on the top.

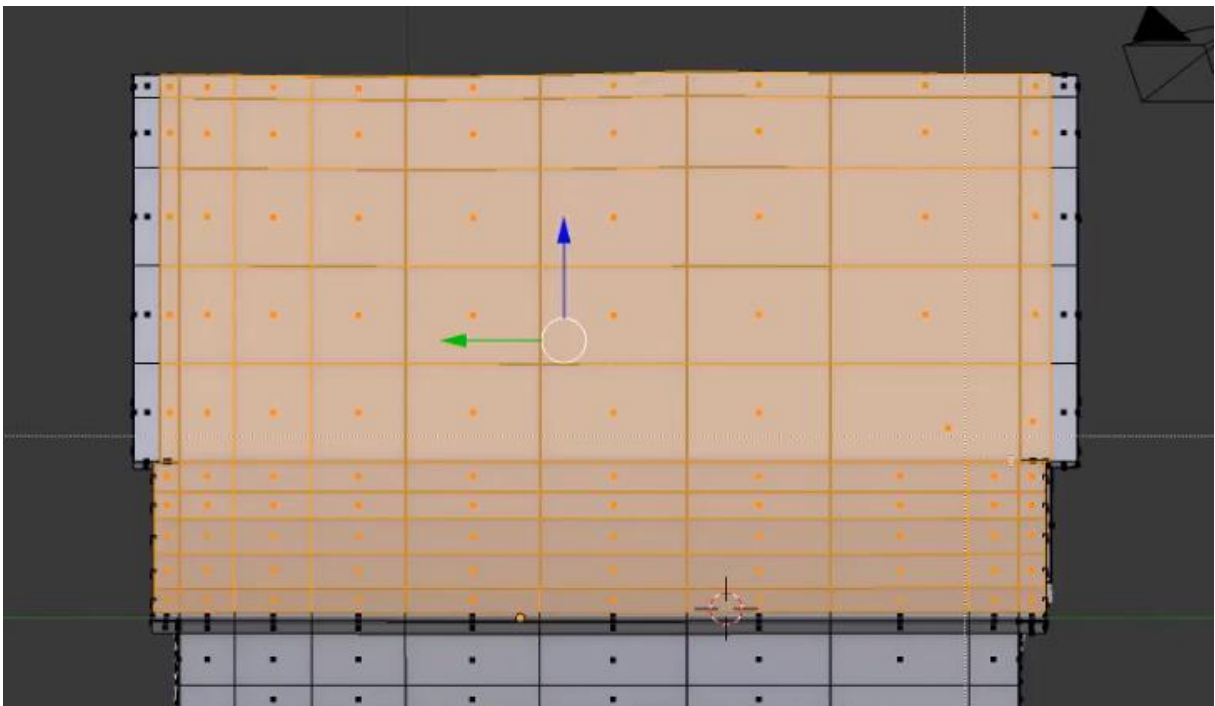
Continue at the other side with the lower roof.



Then delete the top two edge loops

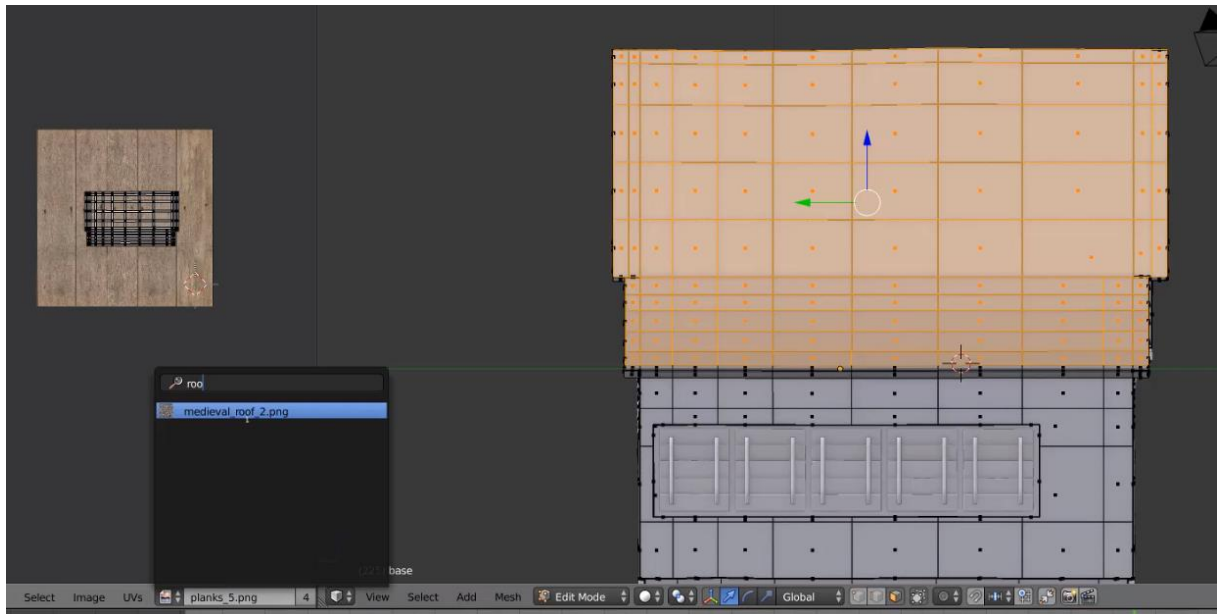


Now we will create the UV-map for the roof. Select one side of the roof with box select, turn around and select the other side as well.

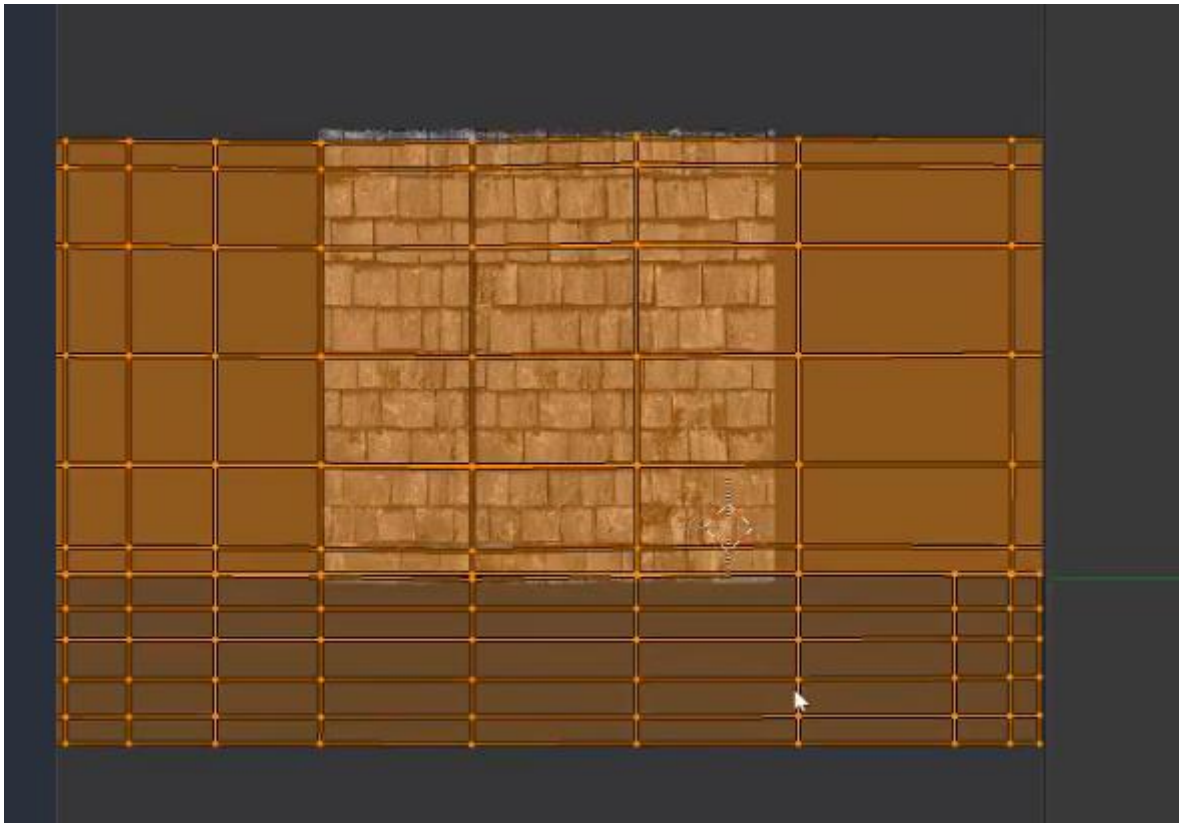


Add what remains to the selection with box select or by adding the faces one by one.

When they are all selected hit “U” and use project from view when viewing from the side in orthographic view. Then go to the UV/Image editor and select the medieval_roof_2.png texture.

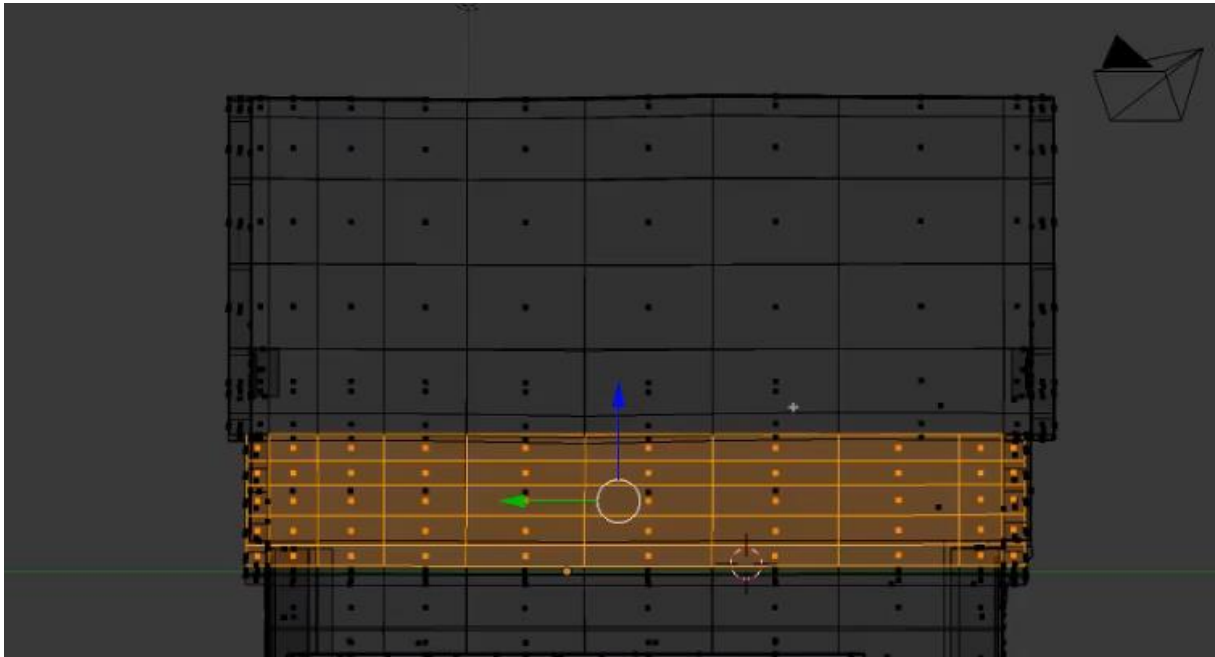


Now scale the UV-map to fit the size of the tiles in the texture better.

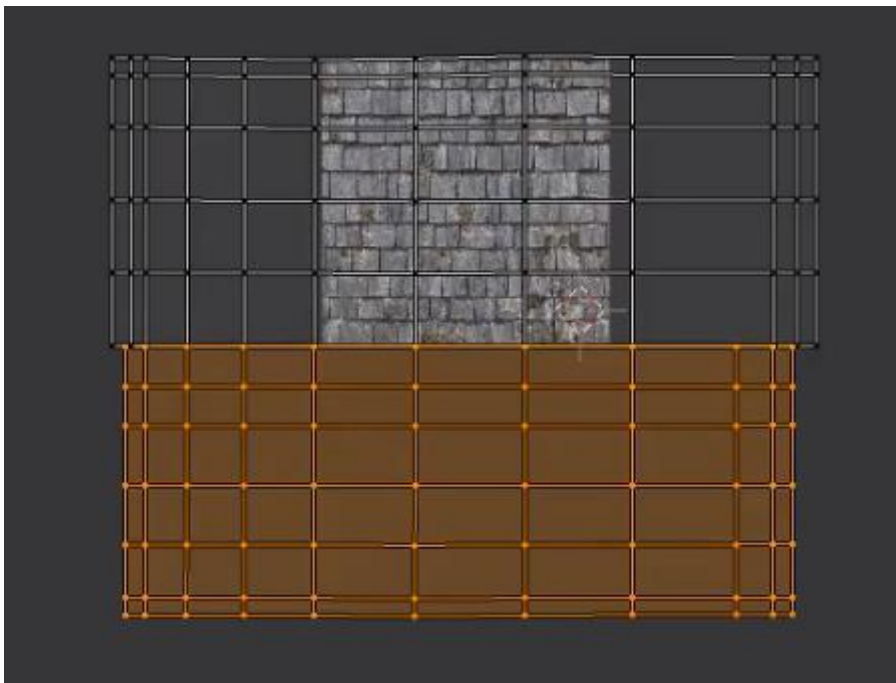


Now we will focus on the lower roof since it does not have all the UV-space it requires. In the 3D view, go to wireframe mode and deselect the top roof by using “Z” followed by “B” to box select and hold shift while dragging and releasing over the top roof faces.

We should be left with this selection.



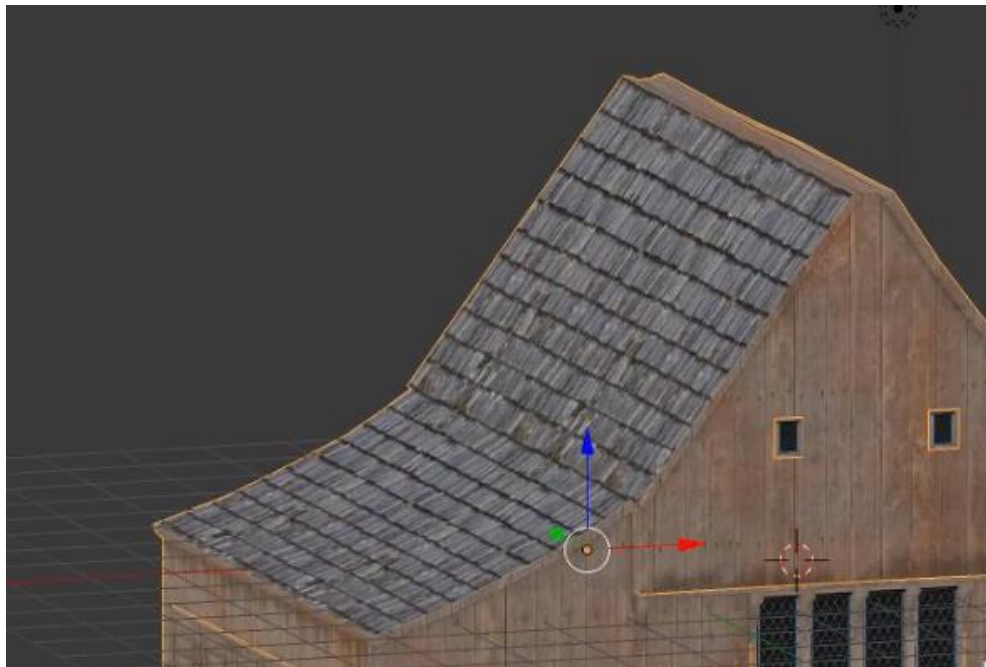
Move the camera up a bit by hitting “**numberpad 8**” a couple of times and make a new “project from view”. Scale the UV-map in the UV/Image editor, scale it up a bit and move it away, then reselect the rest of the roof so that we bring those UVs back into view. Now we need to align the top and lower roofs so that they texture aligns between them. This should be how the final UV-map should look.



Now go to the material view in the 3D viewport and make sure that the whole roof is selected before you select the “roof_grey” material and hit assign.

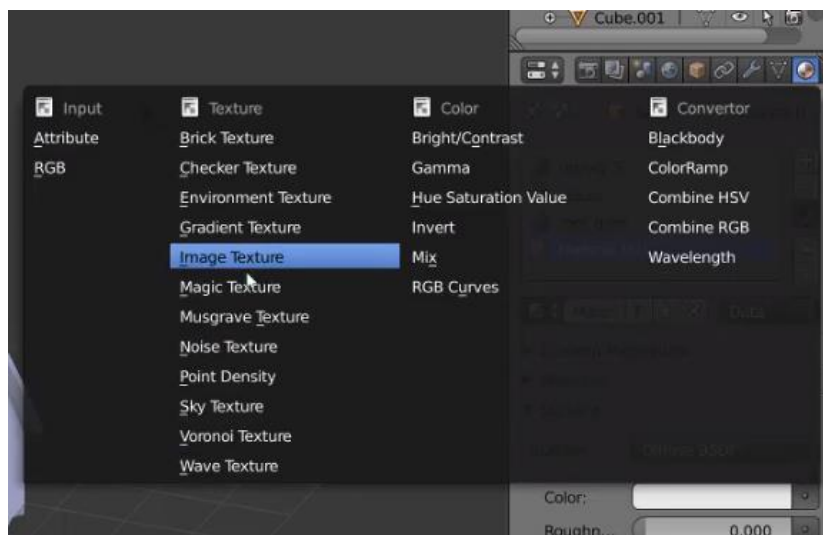


If we did everything correct we will have rooftiles at this point.

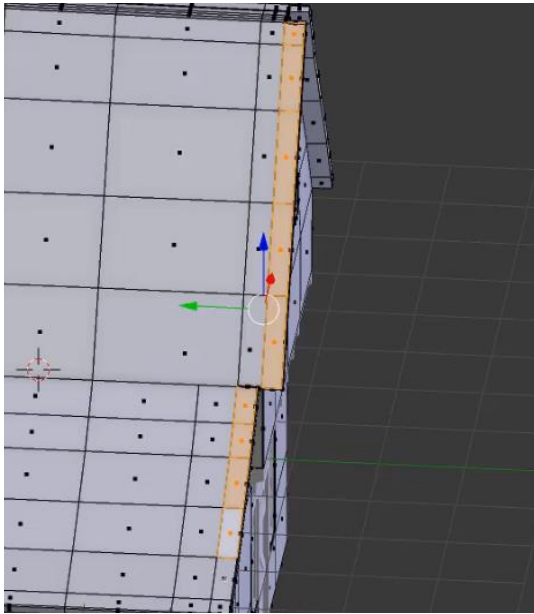


Take a good look at your model and make sure that you didn't miss any faces on either side of the roof while assigning the "grey_roof" material. If you missed any, just assign them as well.

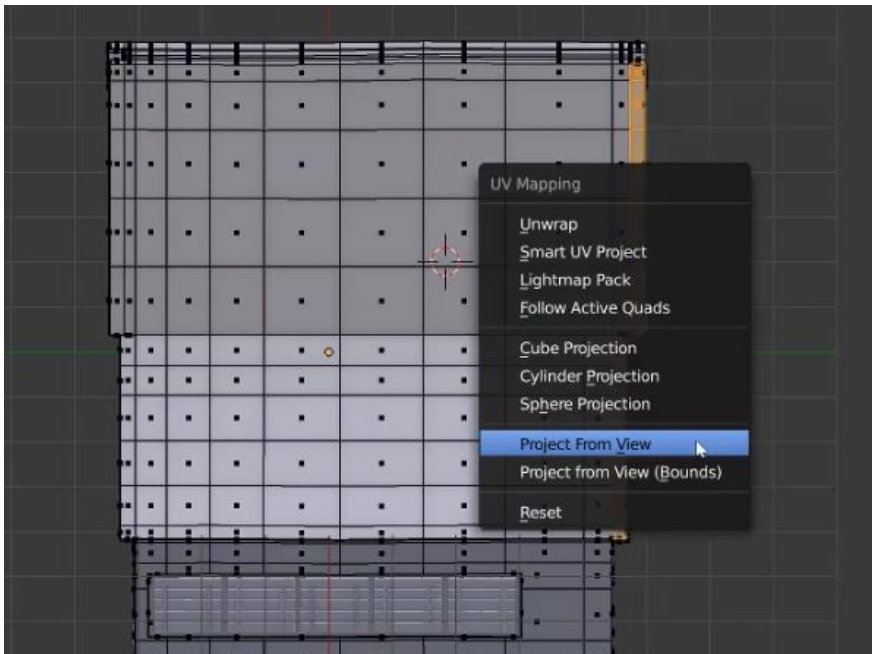
Now we will add some weatherproofing to the edges of the roof. Add a new material. Press the dot next to the color in the surface section in the properties panel and add an image texture.



In the video we call this “sealing” new material “sealing”. Click open and browse for the image called “roof_tin.png”. Now select the sides of the roof.



Select the “sealing” material and click assign to make this material apply to these faces. Use the number pad to align the view and make a “project from view” for the UV-map.



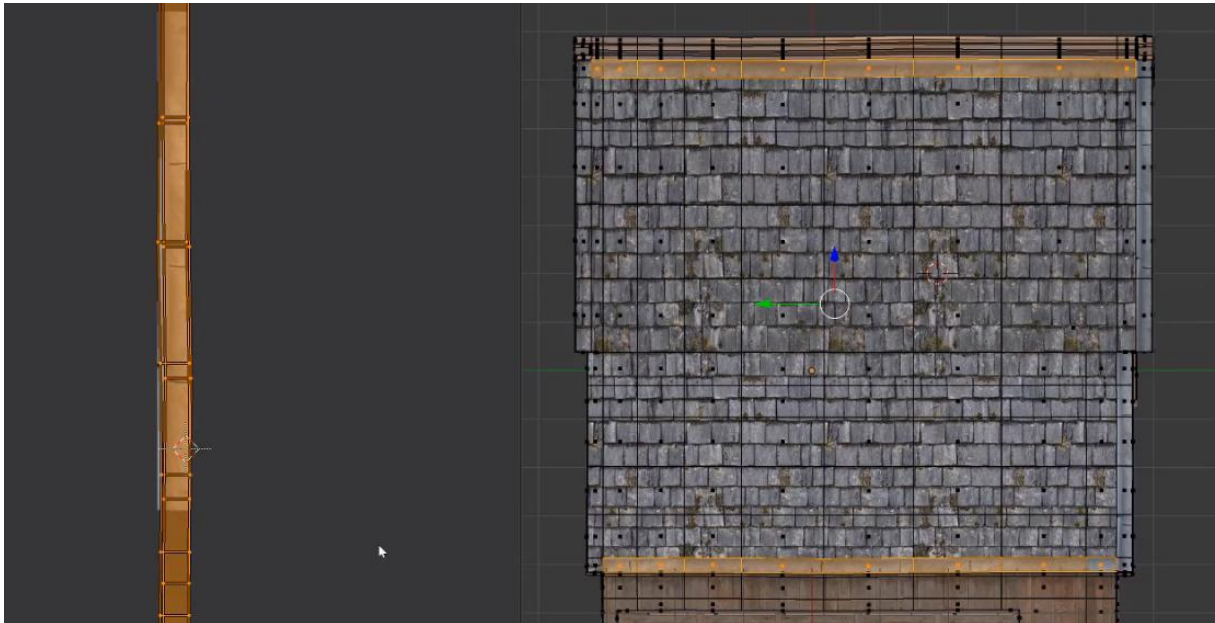
In the UV/Image editor choose the “roof_tin.png” image and scale the UV-map so that it fits well on the texture.



To select an entire UV-island remember the “ctrl+L” shortcut. Move the two sides so that they overlap on the texture like this. The result will be something like this.

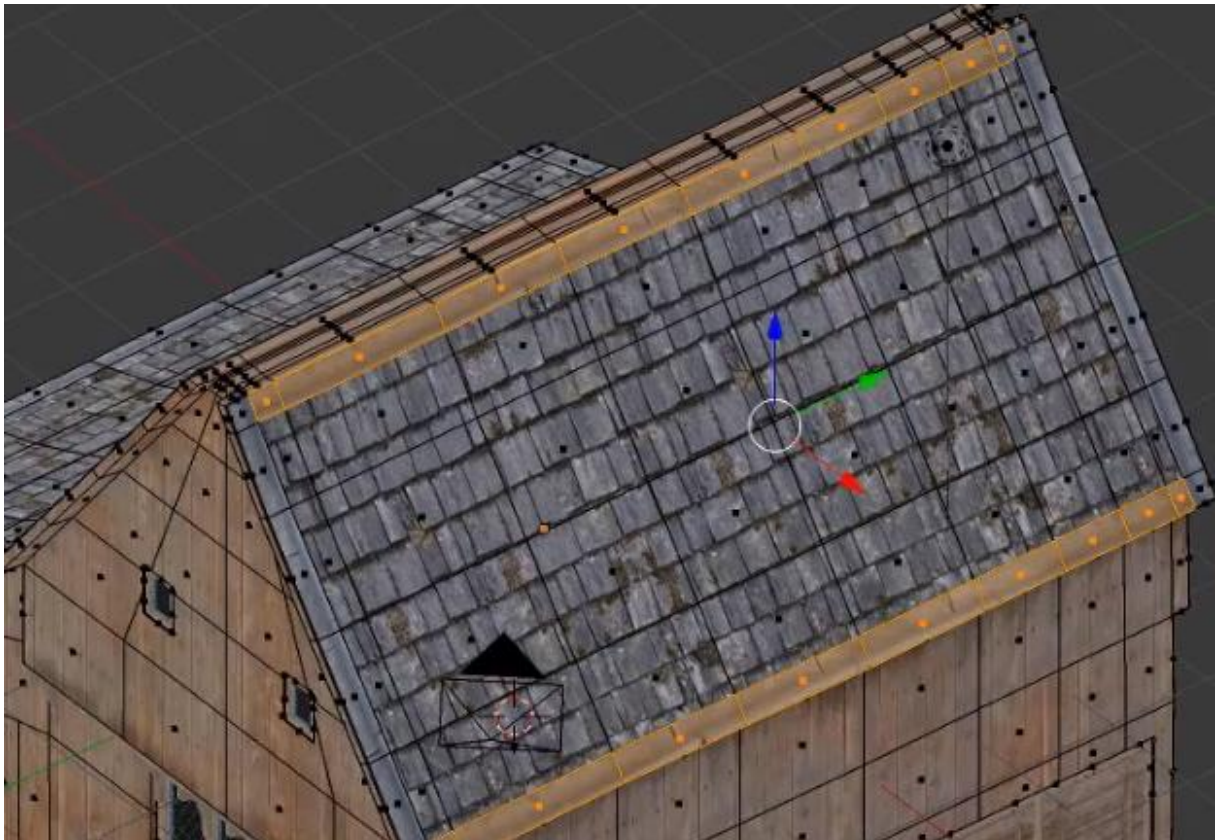


Now continue around and add all the edges that we created in the beginning of the lecture. If you add faces that go in one direction at a time you will only have to rotate one direction and you can add the other faces separately.



You can see that the texture has a bulge on one of the sides. We want this part to face towards the roof tiles. To flip the texture, you can scale the uv-map in the X direction by negative 1. Press “S” followed by “X” followed by “-1” to do this.

Go around on the other side of the roof as well and continue the process until the roof tiles has kind of a border around them.



When we have gone around and done this this lesson is over and in the next one we will continue to add some ornaments on the front of the building just below the roof.